

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT  
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 9 March 2005 (20050309/ED)

FILE RELOADED: 19 October 2003.

=> ("protamine sulfate" or polylysine or defensin or lysozyme or lactoperoxidase) and a  
5311 "PROTAMINE"  
594 "PROTAMINES"  
5594 "PROTAMINE"  
("PROTAMINE" OR "PROTAMINES")  
140334 "SULFATE"  
4205 "SULFATES"  
142239 "SULFATE"  
("SULFATE" OR "SULFATES")  
1382 "PROTAMINE SULFATE"  
("PROTAMINE"(W)"SULFATE")  
2197 POLYLYSINE  
67 POLYLYSINES  
2227 POLYLYSINE  
(POLYLYSINE OR POLYLYSINES)  
1458 DEFENSIN  
1068 DEFENSINS  
1885 DEFENSIN  
(DEFENSIN OR DEFENSINS)  
18477 LYSOZYME  
887 LYSOZYMES  
18732 LYSOZYME  
(LYSOZYME OR LYSOZYMES)  
2476 LACTOPEROXIDASE  
9 LACTOPEROXIDASES  
2476 LACTOPEROXIDASE  
(LACTOPEROXIDASE OR LACTOPEROXIDASES)  
40578 ANTIMICROBIAL  
3842 ANTIMICROBIALS  
42434 ANTIMICROBIAL  
(ANTIMICROBIAL OR ANTIMICROBIALS)  
4531 MALEIMIDE  
212 MALEIMIDES  
4655 MALEIMIDE  
(MALEIMIDE OR MALEIMIDES)  
L2 1 ("PROTAMINE SULFATE" OR POLYLYSINE OR DEFENSIN OR LYSOZYME  
LACTOPEROXIDASE) AND ANTIMICROBIAL AND MALEIMIDE

=> d ti

L2 ANSWER 1 OF 1 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on S  
TI LACTO PEROXIDASE CATALYZED INCORPORATION OF THIO CYANATE ION  
PROTEIN SUBSTRATE.

=> d ab bib

L2 ANSWER 1 OF 1 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on S  
AB \*\*\*Lactoperoxidase\*\*\* [bovine milk] catalyzed the peroxide-dependent  
incorporation of thiocyanate ion into a protein substrate. This activity  
was studied as a model for the peroxidase-dependent antithyroid and  
\*\*\*antimicrobial\*\*\* action of thiocyanate. Two types of incorporation  
were observed. When the amount of peroxide added did not exceed the  
amount of protein sulfhydryls, the S and C portions of thiocyanate were  
incorporated in a one-to-one ratio. This type of incorporation was  
eliminated when protein sulfhydryls were blocked by reaction with  
N-ethylmaleimide. These results indicated incorporation of the intact  
thiocyanate moiety into a derivative of cysteine residues. Incubation  
with a sulfhydryl compound such as dithiothreitol resulted in release of  
the bound thiocyanate moiety. A 2nd form of incorporation was observed  
when peroxide exceeded protein sulfhydryls. Incorporation of C exceeded  
that of S. Blocking of protein sulfhydryls or addition of a sulfhydryl  
compound had no effect on this form of incorporation. Studies using amino  
acid and poly(amino acid) substrates indicated that modification of  
tyrosine, tryptophan and histidine residues accounted for this  
incorporation. Similar modification of protein sulfhydryls and aromatic  
amino acids was obtained with the thiocyanate analogue of the halogens,